

# Milwaukee County COVID-19 vaccine data summary

## Milwaukee County COVID-19 Epidemiology Intel Team

This report was updated on March 23, 2023 and includes data through March 20, 2023. Note that data for recent weeks may be under-reported due to lags in data entry. This report includes data on primary vaccinations and booster doses.

Milwaukee County COVID-19 Vaccination Totals December 12, 2020 - March 20, 2023			
	Milwaukee County	City of Milwaukee	Suburbs
<b>Total primary vaccine doses administered</b>	<b>1,189,189</b>	<b>678,126</b>	<b>511,063</b>
Pfizer	719,845	435,352	284,493
Pfizer Age 5-11	60,629	32,069	28,560
Pfizer Age 6M-4Y	11,180	4,593	6,587
Moderna	356,235	182,662	173,573
Moderna Age 6m-5Y	6,536	2,691	3,845
Johnson & Johnson	34,764	20,759	14,005
<b>Total vaccine doses administered (including boosters)</b>	<b>1,771,352</b>	<b>972,174</b>	<b>799,178</b>
Pfizer	968,290	571,129	397,161
Pfizer Age 5-11	66,323	34,399	31,924
Pfizer Age 6M-4Y	11,227	4,621	6,606
Pfizer Bivalent Booster	115,610	63,976	51,634
Moderna	505,497	249,199	256,298
Moderna Age 6M-5Y	6,582	2,706	3,876
Moderna Bivalent Booster	55,230	21,821	33,409
Johnson & Johnson	37,495	22,193	15,302
<b>*Total individuals with one or more doses</b>	<b>634,818</b>	<b>365,824</b>	<b>268,994</b>
Pfizer	372,332	226,782	145,550
Pfizer Age 5-11	32,276	17,548	14,728
Pfizer Age 6M-4Y	5,027	2,312	2,715
Moderna	183,961	95,064	88,897
Moderna Age 6M-5Y	3,629	1,535	2,094
Johnson & Johnson	34,658	20,694	13,964
<b>*Total individuals completely vaccinated</b>	<b>590,063</b>	<b>334,514</b>	<b>255,549</b>
Pfizer	348,830	209,172	139,658
Pfizer Age 5-11	28,573	14,688	13,885
Pfizer Age 6M-4Y	2,361	758	1,603
Moderna	172,616	87,944	84,672
Moderna Age 6M-5Y	2,916	1,163	1,753
Johnson & Johnson	34,658	20,694	13,964
<b>*Total individuals boosted</b>	<b>352,871</b>	<b>184,547</b>	<b>168,324</b>
Pfizer	208,857	114,751	94,106
Pfizer Age 5-11	10,267	4,394	5,873
Pfizer Age 6M-4Y	38	9	29
Moderna	116,358	55,532	60,826
Moderna Age 6M-5Y	489	176	313
Johnson & Johnson	16,857	9,680	7,177
<b>*Individuals are grouped by the first vaccine product received. Note a small number of people received a different vaccine product for their second dose in a series</b>			

**Percentage of Population Vaccinated  
December 12, 2020 - March 20, 2023**

	<b>Overall</b>	<b>Ages 5+</b>	<b>Ages 12+</b>	<b>Ages 16+</b>
<b>Milwaukee County</b>				
*Population	954,209	887,487	796,322	747,409
Received one or more doses	66.5%	70.6%	74.6%	75.3%
Completely vaccinated	61.8%	65.9%	69.8%	70.6%
<b>City of Milwaukee</b>				
*Population	596,886	551,401	489,445	456,809
Received one or more doses	61.3%	65.6%	70.3%	71.4%
Completely vaccinated	56.0%	60.3%	64.9%	66.0%
<b>Milwaukee County Suburbs</b>				
*Population	357,323	336,086	306,877	290,600
Received one or more doses	75.3%	78.6%	81.3%	81.6%
Completely vaccinated	71.5%	75.0%	77.6%	77.9%

**\*Population estimates from 2018 US Census American Community Survey**

**Percentage of Population Boosted  
December 12, 2020 - March 20, 2023**

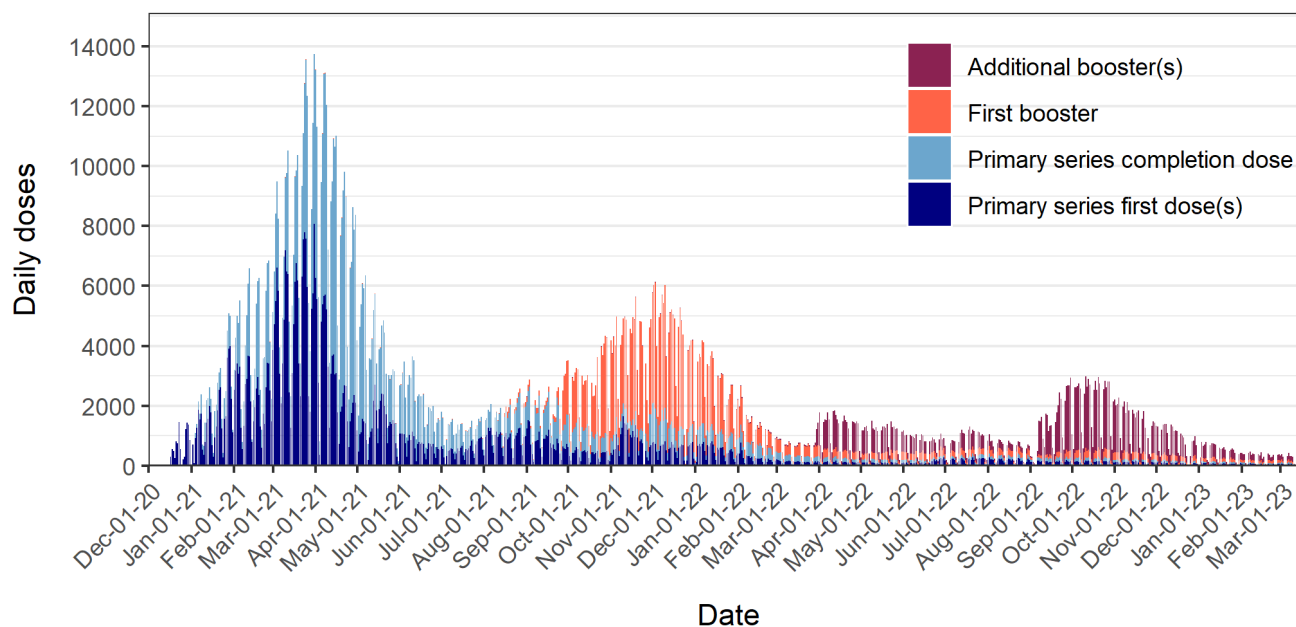
	<b>Overall</b>	<b>**Booster eligible</b>
<b>Milwaukee County</b>		
*Population	954,209	580,647
Received booster dose	37.0%	60.6%
<b>City of Milwaukee</b>		
*Population	596,886	329,572
Received booster dose	30.9%	55.9%
<b>Milwaukee County Suburbs</b>		
*Population	357,323	251,075
Received booster dose	47.1%	66.9%

**\*Overall population estimates from 2018 US Census American Community Survey**  
**\*\*Booster eligible population is aged 5+ with complete primary vaccination prior to October 21, 2022 for Pfizer or Moderna series, or prior to January 19, 2023 for Johnson & Johnson**

## Daily COVID-19 doses administered to Milwaukee County residents

**Figure 1** shows daily total COVID-19 vaccine doses administered to Milwaukee County residents. A total of 1,771,352 doses (including booster doses) have been administered from December 12, 2020 through March 20, 2023. The dark blue color represents the first dose in a series (Pfizer or Moderna). The light blue color indicates a completion dose (first dose of Johnson & Johnson, second dose of Pfizer or Moderna, or third dose for Pfizer age 6M-4Y). The orange color indicates a booster dose (second dose following Johnson & Johnson or third dose following Pfizer or Moderna series).

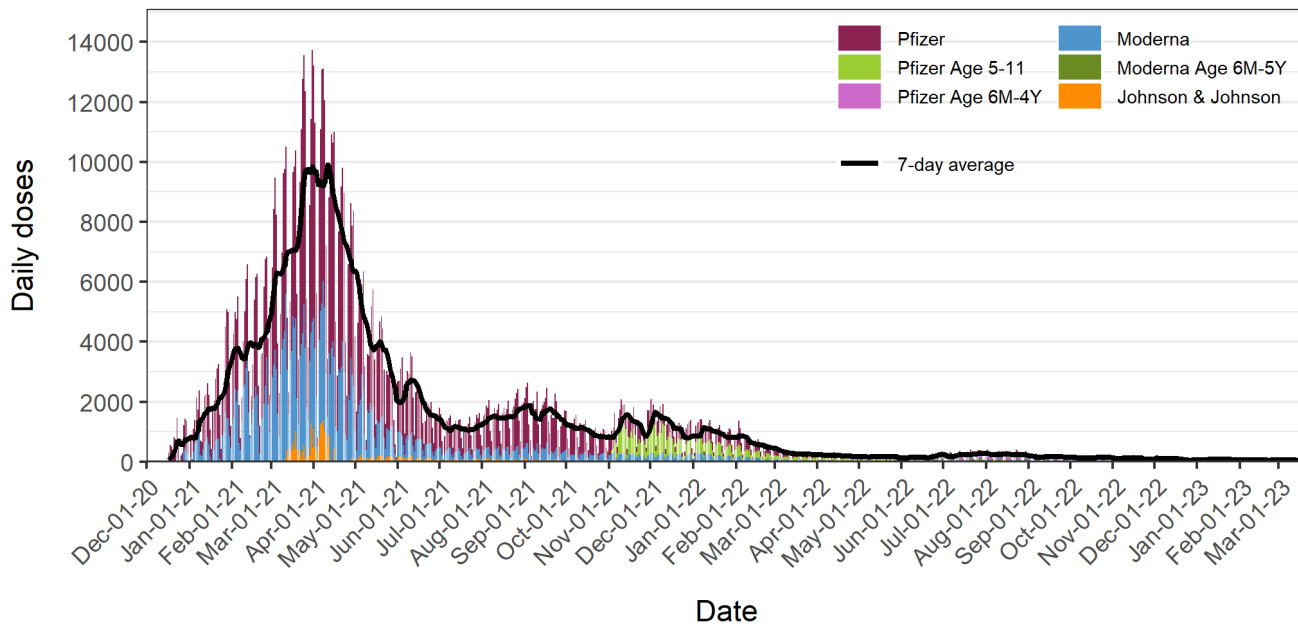
**Figure 1: Daily COVID-19 vaccine doses administered to Milwaukee Co. residents**



Data source: Wisconsin Immunization Registry (WIR)  
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

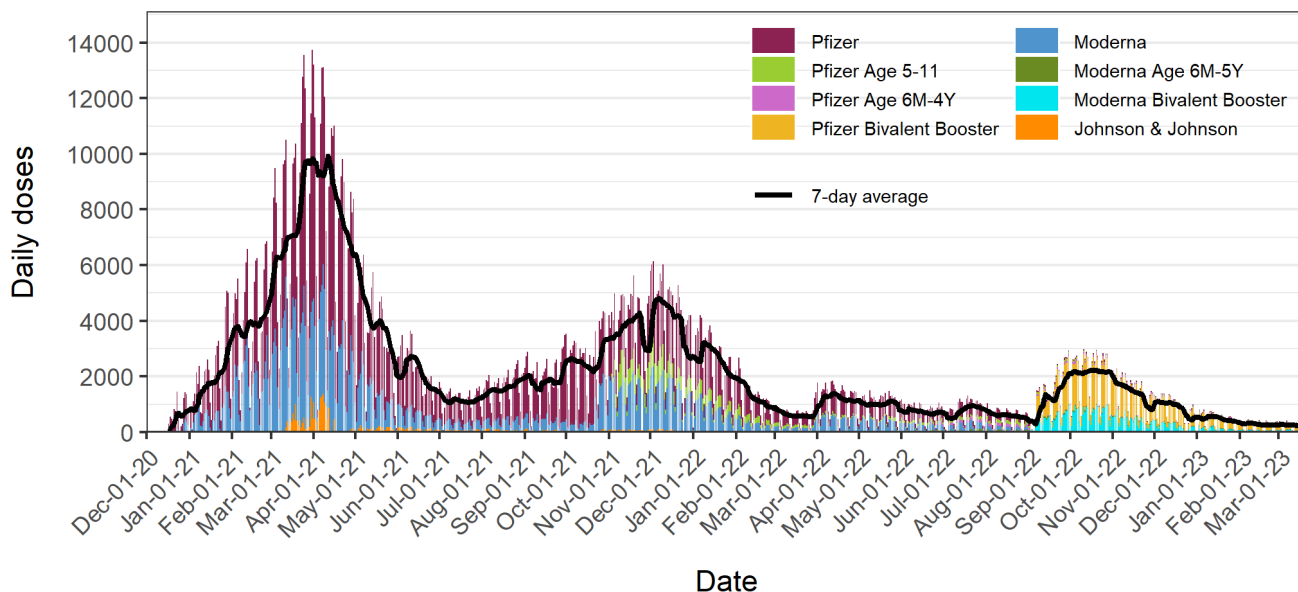
**Figures 2a and 2b** show daily COVID-19 vaccine doses administered to Milwaukee County residents; **Figure 2a** includes primary vaccination doses only, and **Figure 2b** shows all doses including boosters. The overlaid black line shows the 7-day average of daily doses and the bars are colored by vaccine: Pfizer (red), Pfizer Age 5-11 (green), Moderna (blue), and Johnson & Johnson (orange). Daily primary vaccination doses peaked in late March to early April 2021 and have since declined until mid-summer when slight increases occurred in tandem with increasing cases thought to be driven by the delta variant. An increase in primary vaccination doses is observed in the second week of November 2021, driven by new eligibility among ages 5-11.

**Figure 2a: Daily COVID-19 primary vaccination doses administered to Milwaukee Co. residents**



Data source: Wisconsin Immunization Registry (WIR)  
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

**Figure 2b: Daily COVID-19 vaccination doses administered to Milwaukee Co. residents (includes booster doses)**

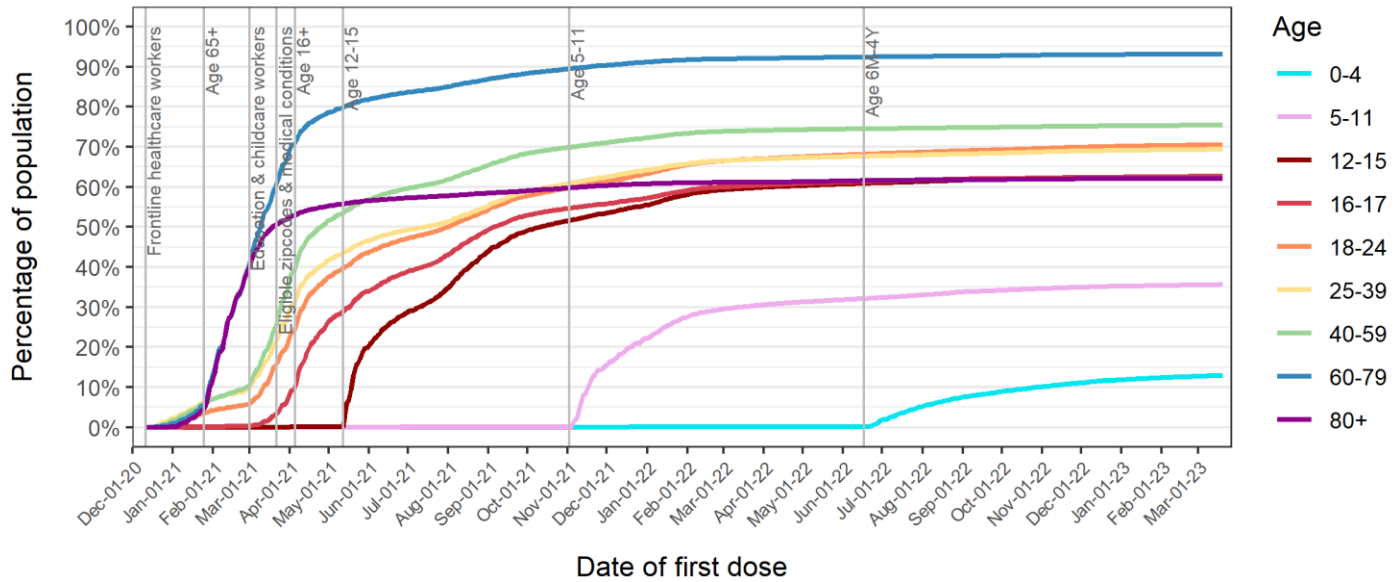


Data source: Wisconsin Immunization Registry (WIR)  
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

## Percentages of Milwaukee County residents partially and completely vaccinated by age group

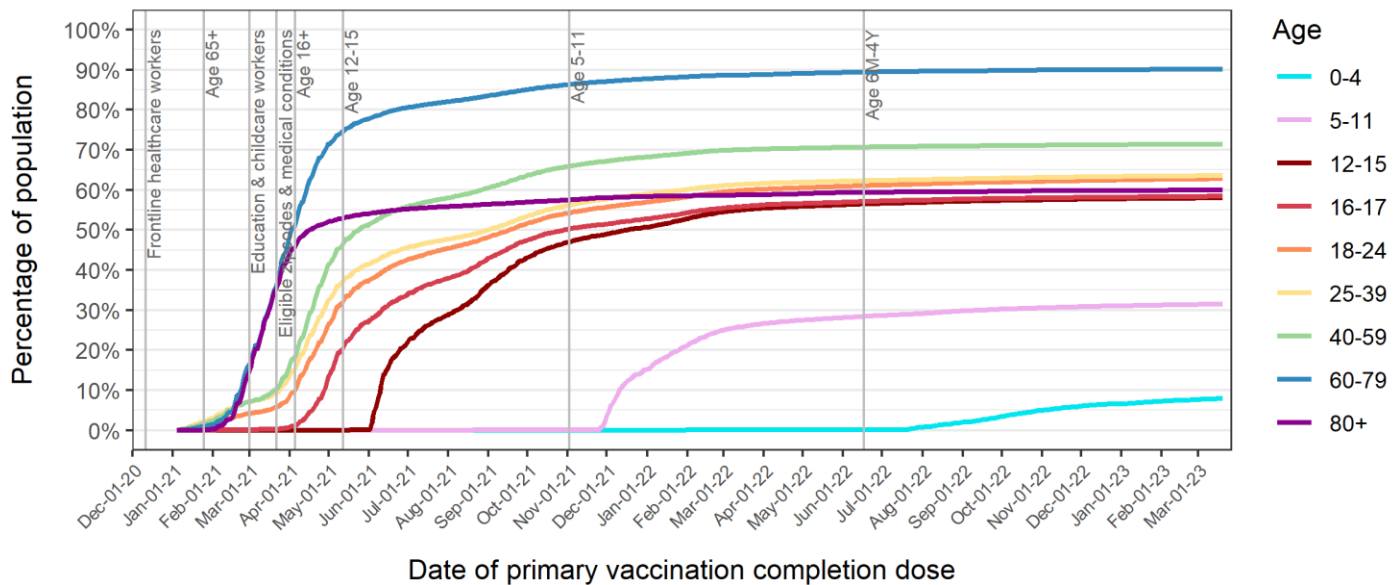
**Figure 3** shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by age group. **Figure 4** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by age group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

**Figure 3: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine**



Data source: Wisconsin Immunization Registry (WIR)  
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

**Figure 4: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine**

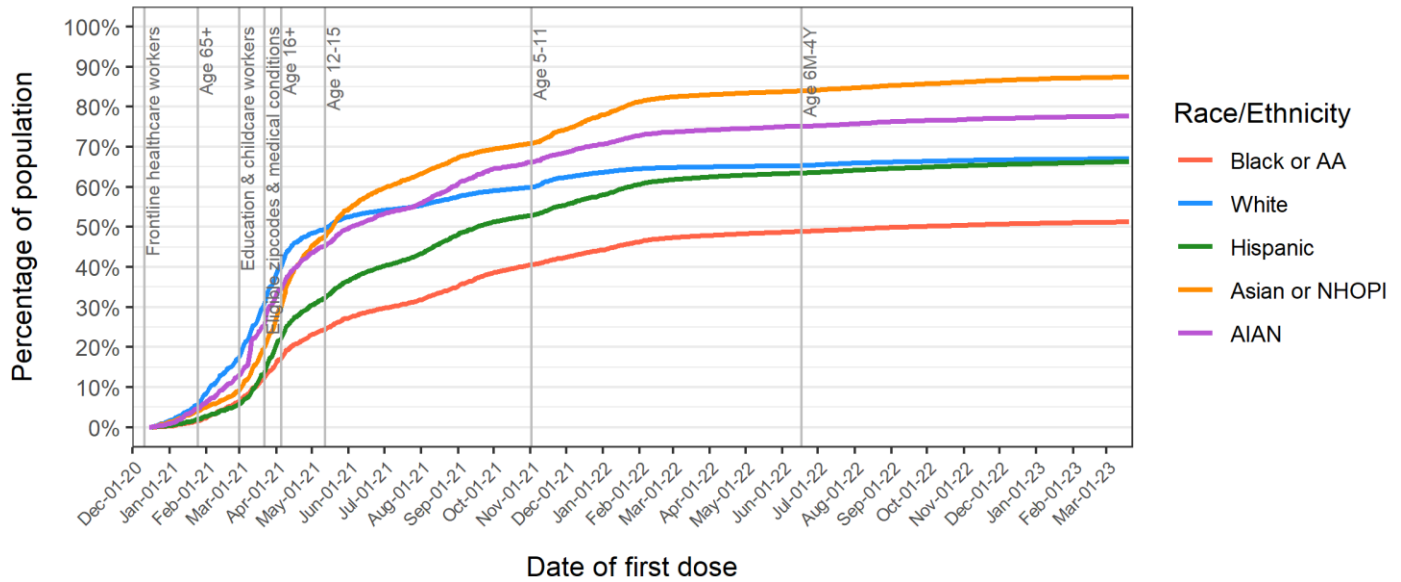


Data source: Wisconsin Immunization Registry (WIR)  
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## Percentages of Milwaukee County residents partially and completely vaccinated by race/ethnicity group

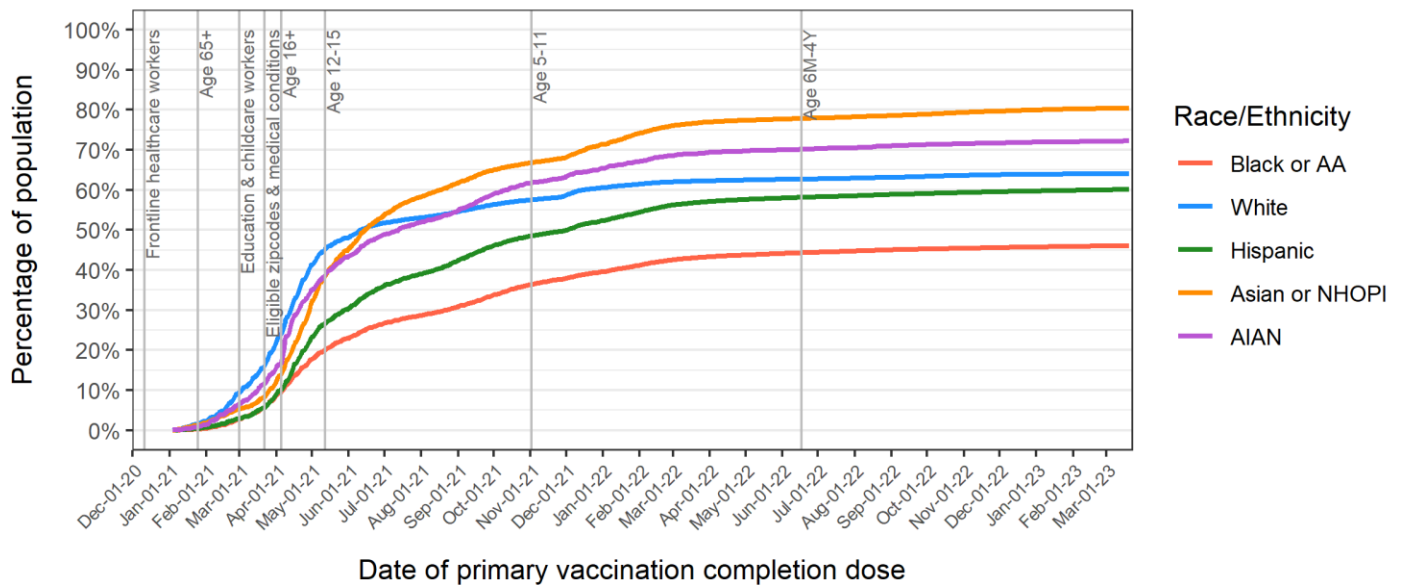
**Figure 5** shows the percentage over time of Milwaukee County residents who received at least one dose of any COVID-19 vaccine by race/ethnicity group. **Figure 6** shows the percentage over time of Milwaukee County residents who are completely vaccinated with any COVID-19 vaccine by race/ethnicity group. The vertical lines show changes in vaccine eligibility in Milwaukee County.

**Figure 5: Percent of Milwaukee Co. residents with at least one dose of any COVID-19 vaccine**



Data source: Wisconsin Immunization Registry (WIR)  
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

**Figure 6: Percent of Milwaukee Co. residents completely vaccinated with any COVID-19 vaccine**



Data source: Wisconsin Immunization Registry (WIR)  
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

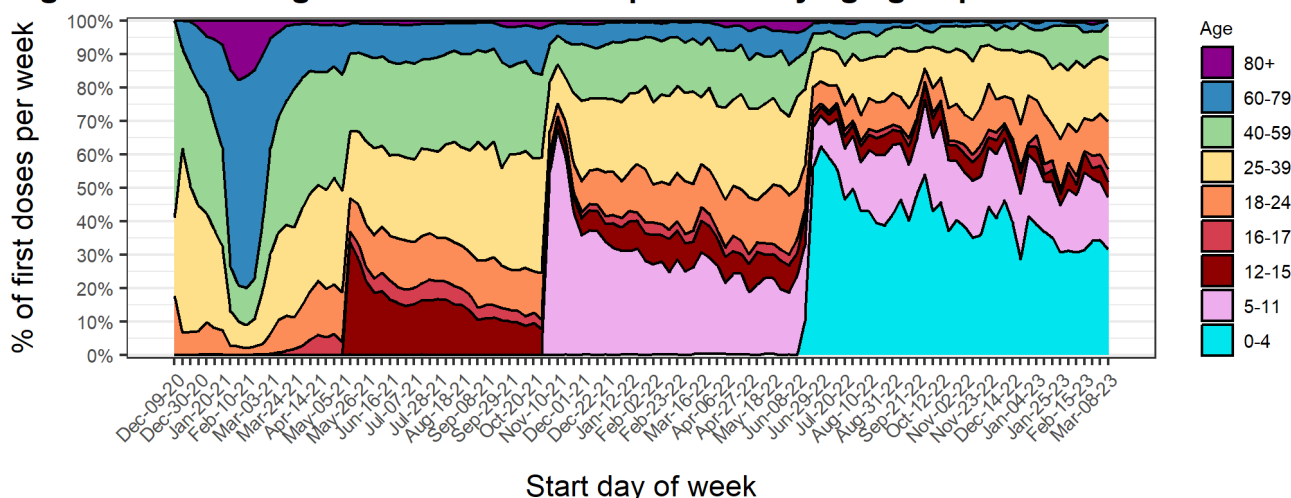


## Percentages of first doses of COVID-19 vaccine administered to Milwaukee County residents by age and race/ethnicity groups

**Figure 7** shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by age group. After vaccines first became available to healthcare personnel, middle-aged groups (25-59) were the majority of new vaccinees. After eligibility opened up to ages 65+, the oldest two age groups became the majority. The younger age groups (< 60) became the majority of people newly vaccinated since eligibility opened up to education staff on March 1st. With the eligibility of children aged 12+, we observed a sharp increase in vaccination for children. Similar increases were observed with the new eligibility of children ages 5-11, and later for ages 6M-4Y.

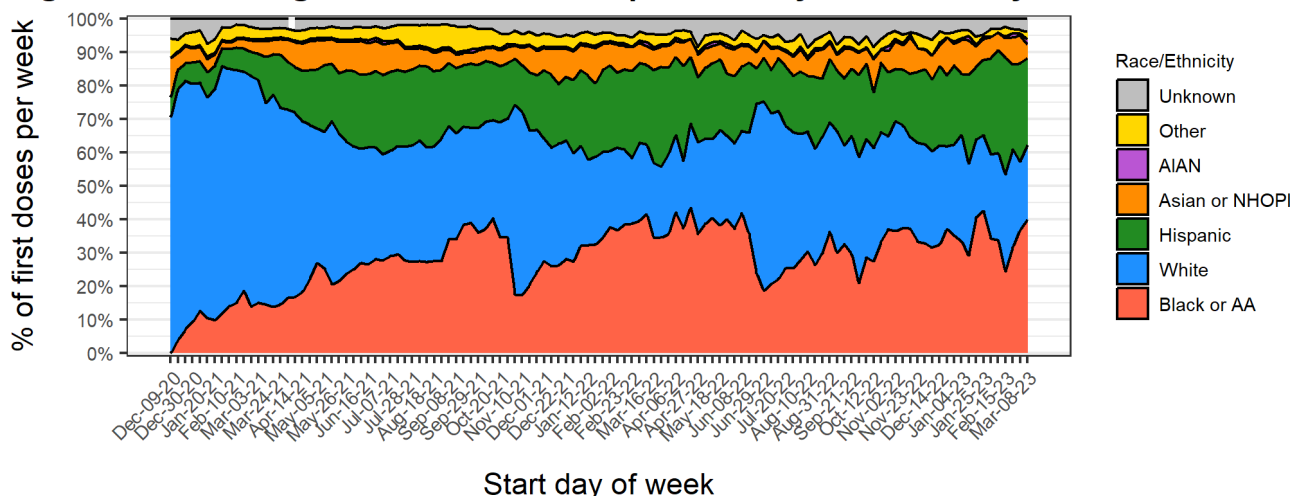
**Figure 8** shows the percentage of first doses of COVID-19 vaccine administered per week to Milwaukee County residents by race/ethnicity. Non-Hispanic Whites were the majority of newly vaccinated individuals for many months, however Black/AA and Hispanic groups have become an increasing proportion of the newly vaccinated over time.

**Figure 7: Percentage of total first doses per week by age group in Milwaukee Co.**



Data source: Wisconsin Immunization Registry (WIR)  
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

**Figure 8: Percentage of total first doses per week by race/ethnicity in Milwaukee Co.**



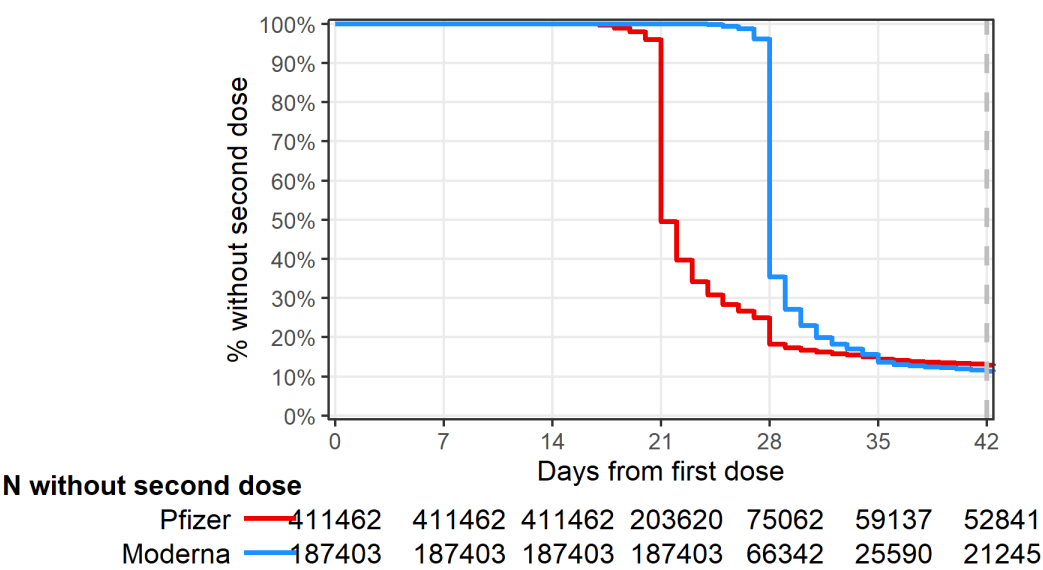
Data source: Wisconsin Immunization Registry (WIR)  
Created by the Milwaukee County COVID-19 Epidemiology Intel Team

# Completion of primary immunization series among Milwaukee County residents who received at least one dose of Pfizer or Moderna vaccines

**Figure 9** describes the timing between primary vaccination doses for Milwaukee County residents who received Pfizer or Moderna vaccines. This graph includes data for residents who received their first dose of Pfizer or Moderna at least 42 days ago (prior to February 5, 2023). The recommended interval for receiving the second dose is 21 days for the Pfizer vaccine and 28 days for the Moderna vaccine; the second dose is considered valid if administered 4 days prior to the recommended interval and up to 42 days following the first dose for each vaccine.

Fully 87.6% of all residents who received their first dose of Pfizer prior to February 5, 2023 received their second dose within 42 days, indicating very strong completion within guidelines for those receiving a first dose.

**Figure 9: Vaccine series completion among Milwaukee Co. residents receiving Pfizer or Moderna**



Data source: Wisconsin Immunization Registry (WIR)  
 Created by the Milwaukee County COVID-19 Epidemiology Intel Team



## Summary of vaccine series completion and booster rates among vaccinated Milwaukee County residents

**Table 1** summarizes the rates of primary vaccination series completion and booster uptake by groups based on first vaccine product received, age, sex, and race/ethnicity. The first column, rates of primary vaccination series completion, includes data for residents who received a first dose of Pfizer or Moderna at least 42 days ago; 42 days is the maximum recommended period for receiving the second dose. The second column, rates of booster uptake, includes data for booster eligible residents only; booster eligibility criteria are currently age 12 or older, with one dose of Johnson & Johnson vaccine at least 2 months ago or completion of Pfizer or Moderna primary vaccination series at least 5 months ago. While vaccine series completion rates are high and vary only slightly among groups, receipt of booster doses among booster eligible individuals varies significantly by vaccine product, age, and race/ethnicity with slight variation by sex.

Characteristic	Percent with second dose within 42 days among Pfizer and Moderna recipients <sup>1</sup>	*Percent boosted among eligible <sup>1</sup>
First vaccine received		
Pfizer	358,621 / 411,462 (87.2%)	218,961 / 373,778 (58.6%)
Moderna	166,158 / 187,403 (88.7%)	116,344 / 172,239 (67.5%)
Johnson & Johnson		16,857 / 34,630 (48.7%)
Age		
0-4	5,511 / 8,269 (66.6%)	
5-11	25,390 / 32,257 (78.7%)	10,233 / 27,708 (36.9%)
12-15	26,505 / 30,545 (86.8%)	12,365 / 28,105 (44.0%)
16-17	13,252 / 15,188 (87.3%)	6,485 / 14,094 (46.0%)
18-24	48,404 / 59,082 (81.9%)	23,632 / 56,194 (42.1%)
25-39	123,956 / 144,506 (85.8%)	71,924 / 140,966 (51.0%)
40-59	143,848 / 160,235 (89.8%)	103,342 / 164,178 (62.9%)
60-79	118,184 / 127,355 (92.8%)	105,724 / 128,321 (82.4%)
80+	19,729 / 21,428 (92.1%)	18,457 / 21,081 (87.6%)
Sex		
Female	281,850 / 320,382 (88.0%)	192,660 / 308,578 (62.4%)
Male	241,860 / 277,069 (87.3%)	158,956 / 270,877 (58.7%)
Unknown	1,069 / 1,414 (75.6%)	546 / 1,192 (45.8%)
Race/Ethnicity		
Black or AA	97,397 / 119,576 (81.5%)	57,631 / 112,820 (51.1%)
White	287,424 / 313,262 (91.8%)	217,267 / 311,632 (69.7%)
Hispanic	73,215 / 87,036 (84.1%)	40,667 / 83,041 (49.0%)
Asian or NHOPI	29,909 / 34,404 (86.9%)	16,953 / 32,058 (52.9%)
AIAN	2,970 / 3,397 (87.4%)	1,909 / 3,314 (57.6%)
Other	19,445 / 22,437 (86.7%)	10,973 / 21,393 (51.3%)
Unknown	14,419 / 18,753 (76.9%)	6,762 / 16,389 (41.3%)

<sup>1</sup>n / N (%)

\*Booster eligible population is aged 5+ with complete primary vaccination prior to October 21, 2022 for Pfizer or Moderna series, or prior to January 19, 2023 for Johnson & Johnson

## Data Sources & Acknowledgments

This report was created by faculty and staff in the Medical College of Wisconsin (MCW) Institute for Health and Equity (IHE) in partnership with representatives from local health departments and faculty from the University of Wisconsin-Milwaukee Zilber School of Public Health. Data sources include the Wisconsin Immunization Registry (WIR) and the US Census Bureau.

## Contact Information

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